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PATENT  
Attorney Docket No.: 000939-052170US

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By: 

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Harold S. Crafts

Application No.:

Filed:

For: SEA-OF-CELLS ARRAY OF  
TRANSISTORS

Examiner:

Art Unit:

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

The references cited below and on attached forms PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are not enclosed. Copies of the references were provided in U.S. Patent Application No. 09/704,115, and/or U.S. Patent Application No. 08/837,589, upon which this application relies for an earlier effective filing date. Thus, pursuant to 37 CFR § 1.98(d), providing copies of the references is not necessary. It is respectfully requested that the cited references be expressly considered during the prosecution of this application.

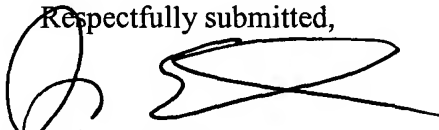
The cited references are:

- 1) U.S. Pat. 6,269,466  
Inventor: Crafts, H.S.  
Issue date: July 31, 2001
- 2) U.S. Pat. 5,869,900  
Inventor: Crafts, H.S.  
Issue date: February 9, 1999
- 3) U.S. Pat. 5,671,397  
Inventor: Crafts, H.S.  
Issue date: September 23, 1997
- 4) U.S. Application No. 09/703,948  
Inventor: Crafts, H.S.  
Filing date: October 31, 2000
- 5) U.S. Application No. 09/703,767  
Inventor: Crafts, H.S.  
Filing date: November 1, 2000

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Irvin E. Branch  
Reg. No. 42,358

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	
				Filing Date	
				First Named Inventor	Crafts, Harold S.
				Art Unit	
				Examiner Name	
Page	1	of	3	Attorney Docket Number	000939-052170US

U.S. PATENT DOCUMENTS					
Examiner	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-5,342,794	08/1994	Wei, Yi-Hen	
	AB	US-5,286,518	02/1994	Cain, et al.	
	AC	US-3,481,361	08/01/1969	Delivorias	
	AD	US4,151,635	05/1979	Kashkooli et al.	
	AE	US-4,143,178	05/01/1979	Harada et al.	
	AF	US-4,229,756	10/21/1980	Sata et al.	
	AG	US-4,244,001	01/06/1981	Alfred C. Ipri	
	AH	US-4,317,690	03/02/1982	Koomen et al.	
	AI	US-4,525,809	06/25/1985	Chiba et al.	
	AJ	US-4,584,653	04/22/1986	Chih et al.	
	AK	US-4,593,205	06/03/1986	Bass et al.	
	AL	US-4,630,219	12/16/1986	DiGiacomo et a	
	AM	US-4,638,458	01/20/1987	Itoh	
	AN	US-4,682,202	07/21/1987	Tanizawa	
	AO	US-4,686,758	08/18/1987	Liu et al.	
	AP	US-4,701,642	10/20/1987	Pricer	
	AQ	US-4,845,544	07/04/1989	Shimizu	
	AR	US-4,849,344	07/18/1989	Desbiens et al.	
	AS	US-4,905,073	02/27/1990	Chen et al.	
	AT	US-4,989,062	01/29/1991	Takahashi et al.	
	AU	US-4,999,518	03/12/1991	Dhong et al.	
	AV	US-5,003,199	03/26/1991	Chuang et al.	
	AW	US-5,008,208	04/04/1991	Liu et al.	
	AX	US-5,013,679	05/07/1991	Kumagai et al.	
	AY	US-5,032,530	07/16/1991	Lowrey et al.	
	AZ	US-5,037,766	08/06/1991	Wang	
	BA	US-5,045,726	09/03/1991	Leung	
	BB	US-5,049,515	09/17/1991	Tzeng	
	BC	US-5,081,518	01/14/1992	El-Dwany et al.	
	BD	US-5,124,776	06/23/1992	Tanizawa et al.	
	BE	US-5,126,279	06/30/1992	Roberts	
	BF	US-5,162,884	11/10/1992	Liou et al.	
	BG	US-5,168,072	12/01/1992	Moslehi	

Examiner Signature	Date Considered
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<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Page **2** of **3****C mplete if Kn wn**

Application Number

Filing Date

First Named Inventor

Crafts, Harold S.

Art Unit

Examiner Name

Attorney Docket Number

000939-052170US

**U.S. PATENT DOCUMENTS**

Examiner	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	BH	US-5,175,118		12/29/1992	Yoneda	
	BI	US-5,225,991		07/06/1993	Dougherty	
	BJ	US-5,294,822		03/15/1994	Verrett	
	BK	US-5,296,755		03/22/1994	Miyamoto et al.	
	BL	US-5,298,805		03/29/1994	Garverick et al.	
	BM	US-5,313,079		05/17/1994	Brasen et al.	
	BN	US-5,313,101		05/17/1994	Harada et al.	
	BO	US-5,314,832		05/24/1994	Deleonibus	
	BP	US-5,341,049		08/23/1994	Shimizu et al.	
	BQ	US-5,388,055		02/07/1995	Tanizawa et al.	
	BR	US-5,432,707		07/11/1995	Leung	
	BS	US-5,444,285		08/22/1995	Robinson et al.	
	BT	US-5,452,245		09/19/1995	Hickman et al.	
	BU	US-5,539,224		07/01/1996	Ema	
	BV	US-5,541,120		07/30/1996	Robinson et al.	
	BW	US-5,654,898		08/05/1997	Roetcisoender et al.	
	BX	US-5,671,397		09/23/1997	Crafts	
	BY	US-5,869,900		02/09/1999	Crafts	
	BZ	US-6,269,466		07/31/2001	Crafts	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
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		Examiner Name	
Page	3	of	3
		Attorney Docket Number	000939-052170US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	IBM Technical Disclosure Bulletin; Vol. 25, No. 4; September 1982; Structured Macro; E.H. STOOPS	
	CB	An Efficient Algorithm for some Mltirow Layout Problems; J. FELDMAN et al.; IEEE Transactions on Computer-Aided Design of Integrated Circuits & Systems; Vol. 12, No. 8, August 1993; pp. 1178-1185	
	AC	10K-Gate GaAs JFET Sea of Gates; H. KAWASAKI et al.; IEEE Journal of Solid-State Circuits; vol. 26, No. 10; October 1991; pp. 1367-1370	
	AD	A Comprehensive CAD System for High-Performance 300K-Circuit ASIC Logic Chips; J. PANNER et al.; IEEE Journal of Solid-State Circuits; vol. 26, No. 3; March 1991; pp. 300-309	
	AE	A Design-System for ASIC's with Macrocells; B. KORTE et al.; IEEE, Euro ASIC '90; 1990; PP. 220-224	
	AG	GaAs MESFET and SiCMOS Cointegration & Circuit Techniques; H. SHICHIJO et al.; IEEE, GaAs IC Symposium, September 1988; pp. 239-242	
	AG	Application of AlGaAs/GaAs HBT's to High-Speed CML Logic Family Fabrication; M. MADIHIAN et al.; IEEE Transactions on Electron Devices, Vol. 36, No. 4, April 1989; pp. 625-631	
	AH	Combining Partitioning and Global Routing in a Sea-of-Cells Design; B. KORTE et al., IEEE Computer-Aided Design; 1989 International Conference; pp. 98-101	
	AI	Size Optimization for CMOS Basic Cells of VLSI, IEEE, pp. 2180-2183, HSIEH et al.	
	AJ	Dependence of Spice level 3 Model Parameters with tRansistor Size, IEEE, pp. 84-89, PERELLO et al.	
	AK	BACHELU et al. "A Study of the Use of Local Interconnect in CMOS Leaf Cell Design," IEEE, pp. 566-570, 1993	
	AL	BACHELU et al. "A Study of the Use of Local Interconnect in CMOS Leaf Cell Design," IEEE, pp. 1258-1261, 1992	
	AM	BARTELINK et al. "Interconnect for Submicron ASICs," IEEE, pp. 59-62, 1989	

Examiner Signature		Date Considered	
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